

Portland Paid Fire Department 1904-1946

"To awaken from a deep sleep, dress, hurry down a brass pole, hitch two horses standing under harness, mount the wagon, open the doors, trip the harness and drive in to the street clear of the doors - to do all this in 13 seconds - that is the record of Chemical Company, Number 1, of the P.F.D. To awaken, dress, go down the pole, hitch and be ready to go out, with all men in position in 9 seconds - that is another record of the company. To stand in position while the gong is struck, have the horses leave their stalls and run twenty feet to get under harness, strap the necessary buckles to complete the hitch, and do all this in 4 seconds is another record." (local newspaper report CA. 1905)

In 1906 E. G. Fanning, engineer, quit the Portland Fire Department. He had been with the department upwards of twelve years and for upwards of twelve years, when he wasn't fighting fires, he was greasing the bearings on his steam apparatus, tightening its nuts and bolts, polishing its sides. When he was fighting fires he was trying to keep differing pressures constant in several different hoses at the same time, watching his boiler to make sure bad water didn't make it boil out, and tending his fire as cinders rained down on him burning his clothes and blistering his skin. E. G. Fanning had once stood at his station working nervously as a crackling electrical wire draped itself over his engine. E. G. Fanning had once gone 3 1/2 years without a vacation. E. G. Fanning was ill from standing in water much of his time. E. G. Fanning was good at his job and dedicated to it, he was typical. In 1906, after twelve years in the department, he had had enough and he quit. Fanning was one of 33 firemen out of a force of 175 that resigned between January and July of 1906. They quit because the rate of \$65-\$75 per month (\$80 for lieutenants and \$85 for captains) made them the lowest paid force in the country, and because 10 days in the summer was the only real time off they got, and because \$40 a month in disability from the relief fund was not enough to cover medical fees if a fireman was injured much less living expenses, and because all of it put together couldn't justify being trapped in a burning building with no way out.

So that was it: The agony and the ecstasy of frontline fire fighting in 1906; politics and financial wrangling aside, putting out fires was the reason the department existed even if politicians considered it little more than a base of power. The show belonged to the firemen - no longer 'redshirts' as they flew to fires in their turnouts, known instead as 'smoke eaters'. The firemen lived together, ate together, worked and drilled together. They had their floating card games, pool games, engine house polka bands. Although living quarters were as pleasantly furnished as possible they were, basically, barracks in chronic disrepair. Horses and men shared the engine house; a plank floor between them that masked their presence to one another, couldn't completely shut out sound and smell.

Still, a fully paid department run by the competent and brave Dave Campbell was by-and-large a dedicated, well trained force. At times the outside world intruded into the

engine house: P. L. Willis led a move in 1904 to have the chief engineer's position delivered back to the mayor for distribution as he so desired; occasionally a charge of incompetence or drunkenness was made in the department; even, in 1909, there was a scandal in which Campbell was charged with neglecting the up-keep of the hydrant system. But the department continued doing what it did best: it fought fires. In 1906 David Campbell was unanimously elected by his peers as president of the Pacific Coast Fire Chiefs' Association. Meanwhile, the amount of fire damage in dollars increased every year.

If the period to 1904 was distinguished by the fight to adequately organize and man a fire department, the new struggle was to put a developing technology in the hands of that department. In this David Campbell was assisted greatly both by the city fathers and the creative staff. By 1906 the first fireboat was on line and efforts to add more were underway. Cisterns and hydrants were being upgraded annually. The alarm system developing all along was consolidated for more efficiency under Superintendent George J. Walker between 1901 and 1906. Until this time, alarms had been routed by the telephone company to one of two central switchboards on either the east or west side of the river. Walker advocated uniting these two independent stations as well as eliminating dependency on the telephone company whose operators, while willing, were not trained.

Furthermore, the noninterfering boxes - boxes installed on one of three circuits so that the signal from one was less likely to be interfered with by the signal from another - were subject to frequent short-circuit, and worse, were still operated by keys held by 'responsible persons' who had to be located before the box could be opened. By 1907 keyless boxes were being installed. The east side station was eliminated. All circuits terminated at city hall central station and the city had a private telephone system.

Automobiles were the rage. David Campbell was not being flashy when he bought his first staff car in 1909, just practical. A Pierce Arrow with high wheels, right hand drive, coal oil lamps, and a rubber-bulb horn; not only was it faster than horses, it was cheaper to feed. At the time a three horse hitch cost from \$750 to \$1,000 to maintain. David Campbell was an early and strong advocate of gasoline power. His advocacy led to a demonstration of a horseless chemical engine in Seattle witnessed by the fire committee members of the Portland executive board on June 1910. The members were impressed by the speed and potential savings. Shortly after the demonstration the city ordered two American-LaFrance chemical and hose engines capable of traveling at 45 mph. As Jerry, Roachy, and Colonel (firehorses) would find out, this was only the beginning.

So it was that on June 26, 1911, if Chief Campbell gave pause to reflect after the first alarm came in from E. Salmon and Water Street, he could look with confidence on the force he had molded in the last fifteen years. Like its chief, it was a force that had learned to do more with less, a force renowned on the Pacific Coast even though covering a city 2 square miles larger than San Francisco it covered it with 400 fewer uniformed firefighters. It was a testimony not only to the vision of David Campbell but to his practical ability in implementing his vision. At times he seemed too perfect, forever feeding carrots to his horse for the press or making a citizen's arrest on some drunk

beating his wife, or commandeering a department vehicle to race a strange boy late to school up to the gate just before the school bell; at times he seemed less than perfect, handling the Civil Service Board arrogantly, or dealing in a less than forthright manner in the hydrant scandal of 1909. But he was a born leader, leading by persuasion or example equally well, a hardheaded scotsman who understood that the only real measure of accomplishment was a job well done.

The alarm from E. Salmon and Water Street was just that: another job. It came into central shortly after 7:45 a.m. A dynamo pump used for pumping oil at the Union Oil distributing plant had thrown a spark igniting gas accumulated in its motor pit. There were oil tanks at Union buried halfway underground, tanks that experts said should have been exposed for ventilation. Campbell knew the fire would be hot; and the cold drizzle outside as he got into his automobile was not good either - it meant fumes would be trapped under the depressing cover. As usual he was one of the first at the scene and he began directing arriving engine companies.

The Union Oil distributing plant was a huge building housing three large oil tanks. After the first alarm, crowds began to gather and the police threw up a cordon to keep them out of the way of steamers hooking up to hydrants. Still, onlookers in buggies were breaking through, their wheels slicing hoses. Engines and hose wagons were forced to maneuver through the maze of tracks in the switchyard behind the building. Shortly after the fire started the explosions began. This was not good. In previous oil tank fires the men had been blessed by a full oil tank that burned without exploding; these tanks were partially full and the heat of the fire was causing the fumes inside to expand. Two full tanker cars in the switchyard were ordered dragged away. With each explosion, a new column of flame and smoke erupted, unfolding slowly against the heavy gray sky.

Assistant Chiefs John Young and "Biddie" Dowell had joined Campbell by now: At approximately 8:15 a.m. the three of them led a platoon to the north wall of the plant and began throwing water on it. Twenty men on the roof of the Standard Oil Company building a hundred feet away poured water onto the roof of the Union Oil building. Strung out along 200 feet of E. Salmon were forty firemen, streams of water looking like flying buttresses against the side of the building. Engine Company #7 fought the fire at the corner of Water and E. Salmon, and next to them #13. By 8:30 every fire company in the city was on line, an incredible jumble of men, machines, and horses, slipping in inches of water as they tried to make out the shouts of superiors and position themselves.

Still, the explosions continued. Campbell watched his men pour water on the fire and made a decision. At around 8:35 the first main tank blew with a muffled roar. Campbell knew the fire was out of control and he knew if they were going to control it, it would have to be from inside the building. He yelled an order to Biddie Dowell who went over to the men of #13 and told them to prepare to cut the soft suction hoses and beat a fast retreat in the event of a bigger explosion.

Then Biddie Dowell and John Young, led by David Campbell, approached the building. Officer L. K. Evans grabbed Campbell's arm and told him not to enter. Campbell

wrenched away, shouting, "I've got to get in there, we can't fight it from outside." As they stepped on the threshold of the building a blast of heat held the three of them back momentarily, and then they disappeared into it.

At 8:39 there was an ominous rumble from the basement as accumulated gases approached their flash point. Paddy Bird, a stoker, bent to pick up a bag of coal to stoke his engine's fire. It is the last act he remembered before waking up in a pile of rubble across the street, his coal sack on his stomach. The second tank blew hurtling a ball of flame and smoke to the sky. Bodies were hurled across the street. Huge tank heads flew 200 ft. in the air. Concrete chunks rained down on panicked witnesses. The west end roof lifted off its support, the north wall - 20 x 125 ft. - was tossed across the street, and the roof fell back to the ground. Just before the explosion Biddie Dowell had exited. John Young, behind Dowell but still in the doorway, was blown across the street. Bleeding badly from the head he tried to issue orders until he was forced into an ambulance. Before the force of the blast picked up Lt. Evans and dropped him in a mud puddle yards away he turned and saw Campbell, silhouetted against the flames, hold up his arms to brace against the falling roof.

By 10:15 a.m. when the fire was brought under control word had passed from engine company to engine company: Chief Campbell had gone into the building before the terrible explosion, and he had not come out again. Rescue efforts began at 10:40, slowly, desultorily, nobody quite wanting to find what they knew was there. A body was found huddled, clothes half burned away. At first they could not be sure: the buttons on the coat bore the insignia "F.D." with no sign of rank. Sometime before he had gone in David Campbell borrowed the coat of one of his men, dying in the coat of a frontline fireman, which he had always been since he was first issued his exempt certificate in 1882.

The passing of David Campbell may have signaled the end of an era - Campbell had successfully straddled the cusp between the old and the new, both in terms of manpower organization and technology; but he left behind a staff that shared his vision of a modern department. The years immediately following Campbell's death, during which B. F. Dowell was chief, were not great ones for the department. Culminating in 1914, when the per capita loss through fire was calculated at a stunning \$6.89 per person for the city, the reputation of Portland as a high-risk city had been growing. Sixteen lives were lost by the close of 1914. Fire insurance companies were threatening to raise rates to the city by 25%.

In many ways Portland seemed a city built to burn, its main commercial area sandwiched on bench lands between timbered hills and the Willamette River. Plentiful fir made the flammable material the construction element of choice and limited land led to narrow streets that promoted the spread of fire while denying access to it. The riverfront was a wonderland of fire hazard: miles of rickety, wind whipped warehouses and docks soaked in petroleum, creosote, and pitch. By 1914 it was becoming obvious to many, Biddie Dowell included, that if you could not stop Portland from burning down once it was aflame then you had better stop it from catching fire in the first place.

Fire prevention was not a new idea in 1914 - as early as 1912 a businessmen's group had organized to promote it in the downtown district; but after the terrible losses of the last three years it was an idea whose time had come. In April of 1914 the citizens of Portland tried again, forming a Safety First Committee concerned with accident prevention in several areas, to which Biddie Dowell appointed P.F.D. Battalion Chief Jay W. Stevens as fire prevention officer. When Stevens took the job, prevention consciousness was not of a high order in the city. Most of the people Stevens interviewed could not locate alarms or escapes in their places of work. Owners of dilapidated buildings refused to renovate or remove them. Stevens found exits in public places blocked with refuse. On pulling a fire alarm at Lincoln High School, Stevens waited for the thunder of feet but was greeted by stillness: it seems that the students did not respond to alarms on any day but Thursday, which was fire drill day. Arson, always a hard crime to prove, had become so profitable that organized arson rings had begun springing up. As one arrestee put it: "The insurance companies bet me \$1,000 against \$14 that I can't burn a house and gives me three years to do it. It's a better game than the ponies." To top off all of this, pulling false fire alarms had become a major form of entertainment, 173 turned in during 1914.

Under the energetic direction of Jay Stevens, appointed Fire Marshal by Mayor Albee, the Fire Prevention Division was officially organized on March 19, 1915. Involving itself widely with the public through events such as National Fire Prevention Week and a clean-up and paint-up campaign in 1916 (8,342 lots cleaned; 1,231 lots planted; 389 houses painted; 113 shacks removed; 754 neglected premises improved; 459 lesser nuisances abated; 131 large unsightly places cleaned; 43,031 pounds of tire cans collected; \$743.46 collected by children for sale of junk; 396 five-ton truckloads of non-burnable rubbish removed) the Fire Prevention Division began realizing immediate results. Fire loss dropped 1/2 million dollars in 1915. Thirty-six days went by without an alarm compared with eight days in 1914. Twenty-one false alarms were recorded in 1915, 1/8 of the 1914 total.

In 1917, after organizing the office of state Fire Marshal, Jay W. Stevens took his expertise to the position of manager of the Pacific Coast Fire Underwriters Inspection Bureau. He left a legacy of trained inspectors picked from the rank and file firefighters, a crack 3-man arson squad, and a developed program for inspection and education in the community. What was left to his successor for the next ten years, Edward Grenfell, was to achieve a statutory base from which his men could operate. The Individual Liability Law, passed by the council in August of 1918, was just such a measure, only the fourth of its kind in the U.S. at the time. It empowered his inspectors to fix liability for unabated fire hazards, liability that carried with it prescribed penalties. Coupled with stricter codes requiring the enclosure of stairway and elevator shafts in fire proof material the Fire Prevention Division was gaining the statutory power it needed to function. Protracted legal struggles with realtors and hoteliers delayed the implementation of some of the codes, but in the wake of the 1920 Elton Court Hotel fire in which a fire started by a careless smoker in the lobby rushed up open stairwells to the roof killing four people, the issue was effectively closed.

A series of mysterious fires beginning in 1922 again gave the arson squad opportunity to

prove its mettle. Empty schools, vacant houses, churches, barns, warehouses, any kind of building that would burn, began to catch fire around the city. A single arsonist was suspected and yet the widespread locations and owners made insurance collection an unlikely, if not impossible motive. Fire Marshal Grenfell took a shot in the dark and began detailing plain-clothed firemen to suspicious fires to observe the crowd. One face reappeared over and over again at the fires, that of a working fireman, one of their own. The man was resourceful and without fear, traveling by motorcycle to do his work and eluding all attempts at pursuit. Even under close observation the man left no evidence. The police charged him with speeding and took away his motorcycle; still the fires burned as he made his rounds on foot. As many as twenty-five men worked on the case at once, off-duty firemen, police, and local citizens. In 1925, three years after the beginning of the investigation, sixty-eight fires had been attributed to this single man. And then in February of that year he was found setting fire to a garage. Judged a pyromaniac the man was remanded to the state hospital.

The cycle of fire loss that Edward Grenfell and his successors had to deal with is a many faceted problem with many partial solutions. The organization of the Fire Prevention Division itself and its organizational evolution from rank and file inspectors to a bureau of specialists was a part of the solution, as was the statutory power to fix liability. In 1922 a campaign was begun to remove dilapidated buildings that led to thousands being razed in the next ten years. Insurance companies were held accountable for over insuring, which encouraged arson. Education of the public was an important factor from the beginning. Even such intangibles as the state of the economy played a part: arson went up when the economy went down. Through it all, the department developed and became more sophisticated. In 1928 when Edward Grenfell became Chief Engineer, Battalion Chief Fred Roberts was named Fire Marshal and began reassigning men from their companies to the Prevention Division for full time inspection work, the number of inspectors rising to 13. Under Roberts, fire loss dropped to a point of a per capita loss below \$1.00 in 1938.

As the city grew, so grew the waterfront. After her initial problems, the George Williams performed admirably with the assistance of Harbor Patrol craft, which had limited firefighting capacity. In 1913 another fireboat joined the Williams, the David Campbell. Built by Smith and Watson Iron Works, the Campbell could pump 12,000 gallons per minute from her turrets. At her speed trials she averaged 16 m.p.h. As with the Williams, the Campbell - her fittings gleaming in the sun as she bobbed proudly in her moorage at the public levee - performed more like a showboat than a fireboat on her first call. While attempting to pump water onto the burning surface of the Steel Bridge she smashed into the bridge damaging her forward turret. This was July 29, 1913. Her response to an August 4 call was even more ignominious according to the Oregonian:

“...For about 30 minutes... she was utterly unable to raise a ‘vacuum’, which is a technical way of saying she didn't throw any water.

However, the Campbell proved her ability to take care of herself, even under the most humiliating circumstances, by gracefully steaming out into the river after the fire had

been subdued by the engines.

Those who watched the performance last night declare the new fireboat is in no danger from destruction from any fire that does not originate in her own hold."

The Campbell, functioning properly, should have been able to put up water in three minutes. The crew claimed she was not functioning properly; Mr. A. F. Smith of the iron works differed and in secret tests his opinion was borne out. With the crew retrained, the Williams and Campbell thereafter successfully steamed the riverfront until 1927-28 when they were mothballed in favor of three new gasoline-powered craft; the new David Campbell, the Mike Laudenklos, and the Karl Gunster. Their specification:

"Each fireboat will be 85' 11" long overall and will have a draft of only five feet six inches so it can get in close to a fire on the waterfront. The boats will be low, 12 feet 6 inches, so they can pass rapidly under bridges without waiting for draws to open. They will have speeds of 18 to 20 mph and will be capable of pumping 8,000 gallons a minute each, at 200 pounds pressure. All controls will be in the pilot house, so that one man can operate the boat and its pump at the same time."

Improvements throughout the Portland Fire Department continued based on necessity or the creativity of the staff. Jay Stevens was at work in 1914 devising an assignment card system for the fire alarms system that was improved by the introduction of a kardex system eleven years later. Overhead cable was replaced by underground cable. In 1928 a building was constructed solely for use as a communications headquarters at N.E. 21st and Pacific Ave. By 1930, 752 boxes were in use, 16 station houses operating and 48 circuits connected the boxes and station houses with the central station.

The last horse drawn vehicle in the department was retired in 1920. In 1933 a Lincoln was specially outfitted and staffed; christened the George Baker Emergency Car. It dealt with injury cases and fire victims. Augmented by the Jay W. Stevens Disaster Car in 1939 - equipped as a mobile headquarters and first aid station - these two vehicles presaged the modern rescue vehicles.

Training also became an issue as firefighting became more sophisticated. A Fire College was established in 1928. A manual for firefighters was put together and trainees tested before the Fire College.

The war years between 1940-45 brought new problems for the department, interrupting the success of the growing programs, if not the programs themselves. In the Bureau of Fire report to the city for 1943-44, Fire Chief Edward Grenfell noted that 10 people had lost their lives to fire, a 300 % increase over the peacetime average. The \$2,677,444.90 loss in property amounted to more than the total fire loss for the six years leading up to the war. In particular the problems that Grenfell had to deal with were a large influx of wartime workers that led to a congested housing situation and the loss of 50 % of his trained firefighting force to military service. He lamented that even when he could keep his companies up to strength it was with substandard manpower, and where he could not,

his already overworked men were forced into overtime.

Grenfell's cover letter for his 1945-46 report, however, reflects a department working its way back to normal and also shows the variety of concerns and programs of the modern Bureau:

"...During the year 1945-46, the Fire Department responded to 5,062 fire alarms, entailing losses amounting to \$1,582,980.91, a per capita loss of \$3.44 based on a population of 460,000.

The Fire Department responded to 67 calls for aid to fires outside the city limits.

Of the total alarms answered, 397 were found to be malicious false alarms; 3,306 fires were confined to buildings or place of origin; the average fire loss per building fire being \$448.57, with the average number of building fires per 1,000 population at 7.4.

The total value of property at risk by fire was \$14,449,014.00 with insurance coverage of \$11,021,923.18.

There were 8 fires, which extended to adjoining buildings and 4 fires, which extended beyond adjoining buildings causing a total exposure loss of \$66,373.50.

All fires were investigated at time of alarm to determine the cause; ownership of property; values involved; amount of insurance coverage; amount of loss and other fire prevention and protection information, a detailed record of which is kept on file.

A total of 30,423 district and special fire prevention inspections were made, which resulted in the abatement of 17,435 hazards. In addition, 8,472 oil heat installations and gasoline pump and tank installations in the city were inspected. A detailed summary of inspection work is included in the following pages of this report.

National Fire prevention week was sponsored by the Junior Chamber of Commerce and conducted by the Fire Prevention Division and the Fire Department. Oregon State Fire Marshal's Department under supervision of State Insurance Commissioner Seth B. Thompson, cooperated by providing 40,000 home fire hazard pamphlets for distribution in city schools. Members of the Fire Department, and Junior Chamber of Commerce, participated in the Fire Prevention Week activities. A complete report of the campaign was forwarded to the Inter-Chamber of Commerce Fire Waste Committee.

Preceding the Christmas season, managers of all large retail stores were contacted in regard to placing of stock, maintenance of aisles and exits, disposal

of waste materials, etc., and were warned of danger of fire and panic in overcrowded stores.

The newspapers were very liberal with publicity requested by this office regarding home fire safety during the Christmas season...

In conclusion, I wish to thank you and the City Council for the splendid support given the Bureau of Fire, also the Police Department and all other Bureaus who have given us their cooperation. I also thank the officers and men of the Fire Department for the whole hearted support given me which has made it possible to maintain an efficient fire fighting organization.

Respectfully submitted,

*Edward Grenfell
CHIEF OF FIRE DEPARTMENT*